

BOOK NOTICE.

GENERAL BIOLOGY: A Book of Outlines and Practical Studies for the General Student. By James G. Needham, Ph. D. Comstock Publishing Co., Ithaca, N. Y.

Although not customary in an entomological journal to notice biological works of a general character, it seems justifiable in the present case, in view of the many illustrations of biological phenomena, taken from the insect world, which the author has introduced into this attractive work.

The book is wholly unlike the ordinary text-books of zoology and botany, in that it is not dominated by any special phase of the subject, but touches upon the entire field; its aim being to guide the general student in following the course of practical studies which it offers rather than to supply him directly with all the knowledge he is expected to acquire.

Each of the seven chapters forms an introduction to some branch of general biology, which is illustrated by references to familiar examples, and the practical exercises which they contain are not studies of animal types but of the biological phenomena in question. These practical studies contain directions for obtaining and preparing the necessary material, as well as for the intelligent study thereof. They are full of valuable suggestions, not only for the student, but for the instructor, and will be found most useful for teachers of biology, entomology and kindred subjects, in both high schools and universities.

The arrangement of the subject matter is somewhat novel, as indicated by the following list of headings of the seven chapters:

- I. The Interdependence of Organisms.
- II. The Simpler Organisms.
- III. Organic Evolution.
- IV. Inheritance.
- V. The Life Cycle.
- VI. The Adjustment of Organisms to Environment.
- VII. The Responsive Life of Organisms.

All the chapters except the second contain many references to insect biology. The first discusses the relations between flowers and insects,